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But I can say, in the language of Cowper,—

“The jay, the pie, and e’en the boding owl,
That hails the rising moon, have charms for me:
Sounds inharmonious in themselves and harsh,
Yet heard in scenes where peace forever reigns,
And only these, please highly for their sake.”

The Screech-owl breeds in hollow trees, more commonly the apple tree, often but a few feet from the ground. Their nest is composed of grass, leaves, and feathers, and contains from four to six white eggs, nearly round. There is no apparent difference in the eggs of the Red and Mottled Owl. Wishing to obtain the eggs of the Red Owl, I requested a friend to secure me some from a nest that had been occupied by the same pair for years. Thrusting his hand into the hole, he withdrew it again in a hurry. In looking into the aperture, the eyes and ears of an owl were quite apparent, but the feathers were fur. The occupant proved to be Mrs. Puss, with her family of four kittens. This is the second instance of the kind that has come to my knowledge, and no doubt the *modus operandi* by which this transformation occurs can be easily explained by the superstitious, as did the ancients the metamorphosing of Jupiter into a bull.

[This article was received May 16th, and put in type before Mr. Allen’s “Notes,” given in the August number, were received.—EDITORS.]

REVIEWS.

THE POPULAR SCIENCE REVIEW, in the July number, contains a lecture by Professor Huxley “On the Animals which are most nearly intermediate between Birds and Reptiles.” Such connecting links do not now exist, but the lecturer finds traces of such links in the fossil *Iguanodon*, and other Dinosaurians, in the Pterodactyle, and especially in the feathered reptile-like bird, *Archæopteryx*, of the Oölite formation; and in the animals, some bird-like, others reptile-like, which lived during the Triassic period in the Connecticut Valley.

I have now, I hope, redeemed my promise to show that, in times past, birds more like reptiles than any now living, and reptiles more like birds than any now living, did really exist. But, on the mere doctrine of chances, it would be the height of improbability that the couple

of skeletons, each unique of its kind, which have been preserved in those comparatively small beds of Solenhofen slate, which record the life of a fraction of Mesozoic time, should be the relics, the one of the most reptilian of birds, and the other of the most ornithic of reptiles. And this conclusion acquires a far greater force when we reflect upon that wonderful evidence of the life of the Triassic age, which is afforded us by the sandstones of Connecticut. It is true that these have yielded neither feathers nor bones; but the creatures which traversed them when they were the sandy beaches of a quiet sea or lake, have left innumerable tracks which are full of instructive suggestion. Many of these tracks are wholly indistinguishable from those of modern birds in form and size; others are gigantic three-toed impressions, like those of the Weald of our own country; others are more like the marks left by existing reptiles, or *Amphibia*. The important truth which these tracks reveal is, that, at the commencement of the Mesozoic epoch, bipedal animals existed which had the feet of birds, and walked in the same erect or semi-erect fashion. These bipeds were either birds or reptiles, or more properly both; and it can hardly be doubted that a lithographic slate of Triassic age would yield birds so much more reptilian than *Archæopteryx*, and reptiles so much more ornithic than *Compsognathus*, as to obliterate completely the gap which they still leave between reptiles and birds.

But if, on tracing the forms of animal life back in time, we meet, as a matter of fact, with reptiles which depart from the general type to become bird-like, until it is by no means difficult to imagine a creature completely intermediate between *Dromæus* and *Compsognathus*, surely there is nothing very wild or illegitimate in the hypothesis that the *phylum*, or genealogical tree, of the class *Aves* has its root in the Dinosaurian reptiles; that these, passing through a series of such modifications as are exhibited in one of their phases by *Compsognathus*, have given rise to the *Ratitæ*; while the Carinate are still farther modifications and differentiations of these last, attaining their highest specialization in the existing world in the Penguins, the Cormorants, the Birds of Prey, the Parrots, and the Song-birds.

However, as many completely differentiated birds in all probability existed even in the Triassic epoch, and as we possess hardly any knowledge of the terrestrial reptiles of that period, it may be regarded as certain that we have no knowledge of the animals which linked Reptiles and Birds together historically and genetically; and that the *Dinosauria*, with *Compsognathus*, *Archæopteryx*, and the Struthious Birds, only help us to form a reasonable conception of what these intermediate forms may have been.

In conclusion, I think I have shown cause for the assertion that the facts of Palæontology, so far as Birds and Reptiles are concerned, are not opposed to the doctrine of Evolution, but, on the contrary, are quite such as that doctrine would lead us to expect; for they enable us to form a conception of the manner in which Birds may have been evolved from Reptiles, and thereby justify us in maintaining the superiority of the hypothesis, that Birds have been so originated, to all hypotheses which are devoid of an equivalent basis of fact.

M. Sanson thinks there are in the East two species of horse, which have hitherto been confounded under the single name of Arab.—Starch granules have been found by M. C. Dareste in eggs. This fact, says M. Dareste, adds to the analogy which is thought to exist between the egg of animals and the seed of plants.—The old stock illustration of the force of food in producing peculiarities of animal structure, namely, that of the production of sex in the bee, by the supply of a particular form of nourishment, has received a death-blow in the researches of M. Sanson. In a paper quite recently published, he narrates numerous experiments which prove beyond question that the food has nothing special to do with the production of sex, which, in point of fact, as worked out by Herr Bastian, depends on the supply of zoöspersms.

A GUIDE TO THE STUDY OF INSECTS. By A. S. Packard, jr., M. D.—Part II. contains chapters on the metamorphoses of insects, their geographical and geological distribution; directions for collecting and preserving insects; a list of the most important entomological works, and a general account of the Hymenoptera, and of the Honey-bee and its mode of building its cells. It consists of 68 pages, with two plates and illus-